

ABSTRACT OF THE DISCLOSURE

The present invention relates to an optical waveguide constituting an optical integrated circuit and a method of manufacturing the same. In a method of manufacturing an optical waveguide having a core layer 22a, 22b, 23b and a cladding layer 23a, 24 for covering the core layer 22a, 22b, 23b, a silicon nitride film serving as the core layer 22a, 22b, 23b is formed by plasmanizing a gas mixture containing methylsilane and at least any one of nitrogen (N_2) or ammonia (NH_3) to react.